

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant: Mazany, et al.

Examiner: P. Marcantoni

Serial No.: 09/871,765

Group Art Unit: 1755

Filed: June 1, 2001

Date: August 12, 2004

For: **INORGANIC MATRIX COMPOSITIONS COMPOSITES AND PROCESS  
OF MAKING THE SAME**

Mail Stop 313 (c)  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RECEIVED**

AUG 13 2004

**OFFICE OF PETITIONS**

**INFORMATION DISCLOSURE STATEMENT**

Sir:

This invention relates to a modified alkali silicate composition for forming an inorganic network. The modified alkali silicate matrix is made by reacting an alkali silicate (or its precursors such as an alkali hydroxide, a  $\text{SiO}_2$  source and water), an acidic oxoanionic compound such as phosphoric acid, water and optionally one or more multivalent cation(s) selected from Groups 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or 16 of the periodic table such as an alkaline earth salt, and optional processing aids. An inorganic matrix composite can be prepared by applying a slurry of the modified aqueous alkali silicate composition to a reinforcing medium and curing the composite at a temperature from about  $15^\circ\text{C}$  up to about  $1000^\circ\text{C}+$  and a pressure from about ambient up to about 20,000 psi, and optionally under a vacuum of about ambient to about  $10^{-3}$  torr. The composite can be shaped by compression molding as well as other known fabrication methods.

As authorized and encouraged under 37 C.F.R. §1.97-1.99, applicant hereby cites as a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the following patents and/or documents, required copies enclosed, which the Examiner should consider with respect to the above-identified United States Patent Application:

**RECEIVED**

AUG 13 2004

U.S. DOCUMENTS <b>OFFICE OF PETITIONS</b>		
PATENT/DOCUMENT NO.	DATE	INVENTOR
3,933,689	January 20, 1976	Ray et al.
3,935,018	January 27, 1976	Ray et al.
3,964,919	June 22, 1976	Ray et al.
3,989,532	November 2, 1976	Ray et al.
4,888,311	December 19, 1989	Davidovits et al.
4,936,939	June 26, 1990	Woolum
FOREIGN DOCUMENTS		
PATENT/DOCUMENT NO.	DATE	COUNTRY
32 46 604	June 20, 1984	DE
ARTICLES/OTHER DOCUMENTS		
Chemical Abstracts, vol. 85, no. 8, 23 August 1976; abstract no. 51069s, M. Tanaka: "Nonflammable inorganic foam" XP000063264		
Chemical Abstracts, vol. 93, no. 4, 28 July 1980, abstract no. 308J0w, J. Ueda et al. "Hardening and Waterproofing soft ground" XP000063866		
Chemical Abstracts, vol. 103, no. 6, 12 August 1985, abstract no. 41661e, "Stabilization of weak foundations" XP000064227		
Chemical Abstracts, vol. 103, no. 12, 23 September 1985, abstract no. 92158d, "Strengthening of soil foundation with neutral grout" XP000064371		

In accordance with 37 CFR 1.98(a)(2)(i) enclosed are copies of only the foreign and non-patent documents for the express purpose of providing the Patent and Trademark Office with an ample opportunity to evaluate the same and to arrive at an independent assessment of its materiality, if any, with regard to the examination of the application.

In reviewing the enclosed copy of the above publication, the Examiner is requested to ignore any underscoring or highlighting which may appear because such markings may or may not have any relationship to the subject matter of the above-identified application. The copy being submitted with this Information Disclosure Statement is the best copy available at this time.

An examination of the present application considering the above documents is requested.

Respectfully submitted,

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Attorney Docket No.: 200EP006 (GOODR-A-1-RCE)

<b>Form PTO-1449</b> U.S. Department of Commerce Patent and Trademark Office  <b>LIST OF PRIOR ART CITED BY APPLICANT</b> (Use several sheets if necessary)		Atty. Docket No.: 200EP006 (GOODR-A-1-RCE)		Serial No.: 09/871,765	
Applicant: Mazany et al.		Filing Date: June 1, 2001		Group: 1755	

  

U.S. PATENT DOCUMENTS							
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	AL	32 46 604	June 20, 1984	DE			
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	AN						
	AO						
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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